UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/822,503	04/02/2001	Richard L. Zinser JR.	18180.0176	7523

7590 08/04/2004

Mark J. Itri, Esq.
McDERMOTT, WILL & EMERY
18191 Von Karman Avenue
Suite 400
Irvine, CA 92612

EXAMINER	
WOZNIAK, JAMES S	

ART UNIT	PAPER NUMBER
2655	18

DATE MAILED: 08/04/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/822,503	ZINSER ET AL.	
	Examiner	Art Unit	
	James S. Wozniak	2655	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *04/02/2001*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-20* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-20* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *02 April 2001* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date *4,6,13*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

Detailed Action

Double Patenting

1. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970);and, *In re Thorington,* 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

2. **Claims 1-20** are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-25 of U.S. Patent No. 6,678,654. Although the conflicting claims are not identical, they are not patentably distinct from each other because the claims in Patent: 6,678, 654 regard more specific and well-known types of the broader "vocoder

standard[s]" (MELP, TDVC) referred to in Claim 1 of the present application. Also, the MELP and TDVC standards are recited in Claim 4 of the present application as acceptable vocoder standards.

Specification

3. The lengthy specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

5. **Claims 1, 2, 5-8, 11-15, 19, and 20** are rejected under 35 U.S.C. 102(e) as being anticipated by Tseng et al *(U.S. Patent: 6,172,974)*.

With respect to **Claim 1, 19, and 20**, Tseng discloses:

A method for transcoding a bit stream representing frames of speech encoded according to a first vocoder standard to a bit stream representing frames of speech encoded according to a second vocoder standard, comprising:

Transforming the first set of vocoder parameters into a second set of vocoder parameters compatible with a second vocoder standard without converting the first set of vocoder parameters to an analog or digital waveform representation *(tandem free vocoder operation method that converts compressed speech signal formats, Col. 5, Lines 27-41)*; and

The steps regarding the decoding and encoding of speech data are necessary in order to transmit and receive speech data and thus, are inherent.

With respect to **Claim 2**, Tseng recites:

A transcoding method, wherein the decoding, transforming, and encoding are performed in real time *(method use in a wireless network, in which real-time decoding, transcoding, and encoding would be inherent, Col. 3, Lines 45-46)*.

With respect to **Claim 5**, Tseng discloses:

A transcoding method, further including: synthesizing the encoded bit stream representing the second set of vocoder parameters into an analog speech signal *(the transcoding method of coded speech data as applied to Claim 1 and a second mobile station that receives the compressed speech, Fig. 2, Element 20. Also, it would be inherent to synthesize the speech data in order to be heard by a user at a second mobile station.)*.

With respect to **Claim 6**, Tseng recites:

Method for transcoding data, comprising:

Transforming the first parametric data to second parametric data encoded according to a second encoding standard, wherein the transforming occurs without converting the parametric data to an analog or digital waveform representation *(tandem free vocoder operation method that converts compressed speech signal formats, Col. 5, Lines 27-41)*.

The step regarding receiving encoded data of a first standard is inherent since it would be necessary to receive the speech data in order perform the subsequent coding standard transformation step.

With respect to **Claim 7**, Tseng discloses:

A transcoding method, wherein the first parametric data and second parametric data represent encoded speech *(conversion of compressed speech signal formats, Col. 5, Lines 27-41)*.

With respect to **Claim 8**, Tseng recites:

A transcoding method, wherein the transforming is performed in real time *(method use in a wireless network, in which real-time transcoding would be inherent, Col. 3, Lines 45-46)*.

With respect to **Claim 11**, Tseng discloses:

A transcoding method, further comprising: encoding the second parametric data into a bit stream according to the second encoding standard *(conversion of compressed speech signal formats to another format when vocoders at mobile stations are not identical, Col. 5, Lines 27-41)*.

Claim 12 contains subject matter similar to Claim 6, and thus, is rejected for the same reasons.

Claim 13 contains subject matter similar to Claim 8, and thus, is rejected for the same reasons.

With respect to **Claim 14**, Tseng recites:

A transcoding method, wherein the data stream represents parametric data *(compressed speech data, Col. 5, Lines 27-41)*.

Wither respect to **Claim 15**, Tseng discloses:

A transcoding method, wherein the data stream in the first compressed format represents encoded speech *(speech data for conversion in a compressed speech signal format, Col. 5, Lines 27-41)*.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

7. **Claims 3, 4, 9, 10, and 16-18** are rejected under 35 U.S.C. 103(a) as being unpatentable over Tseng et al.

With respect to **Claim 3**, Tseng teaches the transcoding method of compressed speech data format conversion as applied to Claim 1. Tseng does not specifically teach vocoder parameters comprising spectral, voicing, gain, and pitch parameters, however, it would have been obvious to one of ordinary skill in the art, at the time of invention, that spectral, voicing,

gain, and pitch parameters would be included within the speech data disclosed by Tseng since these parameters are common and well-known for use in vocoders to code a speech signal.

With respect to **Claim 4**, Tseng teaches the transcoding method of compressed speech data format conversion as applied to Claim 1. Tseng does not specifically teach speech data formats as LPC, MELP, or TDVC; however, it would have been obvious to one of ordinary skill in the art, at the time of invention, that the speech data format disclosed by Tseng could be any one of MELP (which uses LPC) or TDVC since these coding formats are well-known in the art and their inclusion would make the transcoder more versatile.

Claims 9 and 16 contain subject matter similar to Claim 3, and thus, are rejected for the same reasons.

Claims 10 and 17 contain subject matter similar to Claim 4, and thus, are rejected for the same reasons.

With respect to **Claim 18**, Tseng teaches the transcoding method of compressed speech data format conversion as applied to Claim 1. Also, encoding speech data is necessary in order to transmit compressed speech to a second vocoder, and thus, is inherent.

Conclusion

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure:

- Hellwig et al *(U.S. Patent: 6,295,302)*- teaches a method of tandem free transcoder operation that allows for the conversion of encoded speech data.

- Kang et al *("Improving Transcoding Capability of Speech Coders in Clean and Frame Erasured Channel Environments," 2000)*- discloses of method of transcoding between different speech coding formats that directly converts parameter values.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to James S. Wozniak whose telephone number is (703) 305-8669 and email is James.Wozniak@uspto.gov. The examiner can normally be reached on Mondays-Fridays, 8:30-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Doris To can be reached at (703) 305-4827. The fax/phone number for the Technology Center 2600 where this application is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the technology center receptionist whose telephone number is (703) 306-0377.

W. R. YOUNG
PRIMARY EXAMINER
acting SPE AU2655

James S. Wozniak
7/27/2004